



Comprehensive Examination Guidebook

Effective January 1, 2023

Copyright © 2023 Appraisal Institute. All rights reserved.

Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written consent of the publisher.

Contents

Section: 1 Policies and Procedures – Applicable to all Exams	4
Testing Windows, Exam Times & Fees	4
Eligibility Requirements	5
Registration and Scheduling	5
Cancellations, Credits & and Rescheduling	7
No-Shows and Re-Authorizations	8
Required Identification and Name Corrections	8
Calculators	9
Spreadsheet Workbook Feature	9
Formulas	9
Units of Measurement	10
What is Permitted in the Examination Room?	10
Misconduct	10
Report Exam Misconduct	11
Pearson VUE Complaints	11
Exam Results	12
Equivalencies	12
Americans with Disabilities Act (ADA)	13
Section 2: Study Tips and Recommended Courses/Textbooks	14
Comprehensive Examination Tips	14
What Can I Use to Study for the Comprehensive Examination?	15
AI Recommended Course and Textbook Study Materials	17
General Comprehensive Exam (MAI path)	17
Residential Comprehensive Exam (SRA path)	19
General Review Comprehensive Exam (AI-GRS path)	20
Residential Review Comprehensive Exam (AI-RRS path)	21
Comprehensive Examination Preparation Courses	21
Section 3: Exam Purpose and Sample Questions	22
General Comprehensive Examination (MAI path)	22
Purpose of the General Comprehensive Exam	22
How to Prepare	22
What is covered in the General Comprehensive Exam (MAI Path)	24

Sample Questions for the General Comprehensive Exam (MAI Path)	25
Residential Comprehensive Examination (SRA path)	31
Purpose of the Residential Comprehensive Exam	31
How to Prepare	31
What is covered in the Residential Comprehensive Exam (SRA Path)	33
Sample Questions for the Residential Comprehensive Exam (SRA Path)	34
Review Comprehensive Examinations (AI-GRS and AI-RRS paths)	41
Purpose of the Review Comprehensive Exams (AI-GRS and AI-RRS paths)	41
How to Prepare	41
What is covered in the Review Comprehensive Exams (AI-GRS and AI-RRS Paths)	42
General Review Comprehensive Examination (AI-GRS Path)	43
Residential Review Comprehensive Examination (AI-RRS Path)	43
Sample Questions for the General Review Comprehensive Exam (AI-GRS Path)	44
Sample Questions for the Residential Review Comprehensive Exam (AI-RRS Path)	47
Contact	47

Section: 1 Policies and Procedures – Applicable to all Exams

The Comprehensive Examination Guidebook provides details regarding policies and procedures relating to the Comprehensive Examination requirement for admission to MAI, SRA, AI-GRS and AI-RRS Designated membership. It is a companion document to Regulation No. 1, 2 and 3. Definitions of terms used in this guidebook are provided in Regulation No. 1, 2 and 3. Wherever this guidebook grants permission to a Chair or Vice Chair of a body to appoint a person or persons to perform a task, the same appointive permission is extended to any person who is designated by the Chair or Vice Chair to make such appointments.

This guidebook provides a detailed overview of what each Comprehensive Examination covers on each designation path and how to best prepare for these examinations. Sample questions taken from previous examination versions are provided at the end.

Testing Windows, Exam Times & Fees

All Comprehensive Examinations are administered during a specified 30-day testing window through computerized testing at Pearson VUE Professional Testing Centers. Examinees have the flexibility to schedule the modules in any order and in any fashion that they choose, subject to hours and availability at Pearson VUE testing centers.

Modules ***cannot*** be taken outside the dates specified for each 30-day testing window.

The following times are allotted for each module:

General Comprehensive Examination (requirement for MAI membership)

- Module I: General Concepts 3.5 hours (210 minutes)
- Module II: Cost Approach / HBU..... 3.5 hours (210 minutes)
- Module III: Income Approach 4 hours (240 minutes)
- Module IV: Sales Comparison Approach 4 hours (240 minutes)

Residential Comprehensive Examination (requirement for SRA membership)

- Module I: Residential Appraisal Concepts 4 hours (240 minutes)

General Review Comprehensive Examination (requirement for AI-GRS membership)

- Module I: General Appraisal Concepts..... 3.5 hours (210 minutes)
- Module II: General Review Theory 3.5 hours (210 minutes)

Residential Review Comprehensive Examination (requirement for AI-RRS membership)

- Module I: Residential Review Theory 3.5 hours (210 minutes)

Payment is taken at the time of registration via the Candidate's AI account. The exam fee is \$150 per module taken. *These fees are based on Pearson VUE's seating fees and exam development. Fees are subject to change.*

Eligibility Requirements

To be eligible to sit for the Comprehensive Exam individuals must be Candidates for Designation who have met the required prerequisites.

If examinees have not met these requirements, they will not have access to the comp registration page on their AI account. Any required course examinations should be taken **at least six (6) weeks prior** to the start date of the Candidate's desired 30-day testing window, to allow time for grading and notifying the Candidate of the results.

Registration and Scheduling

Candidates may register for the Comprehensive Exam by logging into their AI account and clicking into their Candidate Checklist through **"View Requirements."**

In the Candidate Checklist, click on the **"Comprehensive Examination"** link. The following page will allow for the selection of a testing window. Candidates may choose which module(s) they want to take during each testing window and are not required to sit for all modules during a testing window.

Candidates must complete an application—which will remain accessible until registrations for each module are activated—each time they register for modules in a particular window. Click the checkboxes next to each module to select which module(s) to register for in a specified testing window. For example, examinees may choose Module 1 for the April testing window and Module 2 for the August testing window.

Examinees may not register for the same module in multiple testing windows at the same time. For example, if examinees register for Module 1 in the August window, they cannot register for Module 1 again until they receive their exam results (or it will cancel the registration).

When completing the application, choose a window and which modules to be taken. Note: All modules will be selected by default, but "uncheck" the boxes next to the module(s) that will not be taken.

The registration page allows examinees to enter **their legal name**; they should enter their name exactly as it appears on their valid state/federal identification card, otherwise they may be ineligible to sit for an exam(s). See more information under the section, [Required Identification and Name Corrections](#).

Examinees may register until the day before the testing window begins. AI Admissions cannot accept new registrations once a testing window is in session.

Once registered, a Candidate must contact Pearson VUE to schedule their exam appointment(s). **Examinees are responsible for scheduling their own exam appointments. Do not wait until the last minute!** Schedule modules via [Pearson's website](#) or its call center at (877) 894-3483. Pearson VUE testing center information and locations can be found at: <http://www.pearsonvue.com/ai/>

Last-minute applicants often do not get their first choice of exam dates and/or location. Examinees may have to travel to another Pearson location if a local testing center is full. In past cases, some last-minute examinees have had to go out of state. Testing centers generally begin to fill up four (4) to six (6) weeks before a testing window begins, so recommended submission dates are set six (6) weeks prior to the start of a testing window. Seats at Pearson VUE testing centers are scheduled on a **first-come, first-served** basis; the Appraisal Institute cannot guarantee availability nor schedule exam appointments for Candidates. For this reason, all examinees should register as soon as possible but no less than **six (6) weeks prior to the examination window start date.**

To apply for accommodations under the Americans with Disabilities Act, [please see this section.](#)

Examinee's experiencing problems with Pearson VUE's website, please contact [online Customer Service](#). The Appraisal Institute and Pearson VUE are separate organizations with separate websites and databases. AI staff **DO NOT** have access to Pearson VUE account login information.

Admissions & Continuing Education

P: (312) 335-4111

E: comp@appraisalinstitute.org

(Next page)

Cancellations, Credits & and Rescheduling

Candidates must request a cancellation before the last day of the testing window. AI Admissions cannot accept cancellation requests after the window has ended.

If an examinee experiences an emergency, they should contact Admissions at (312) 335-4111 at the very earliest opportunity to notify the staff of the situation.

Candidates may choose to cancel their exam registration, and their exam fees will be returned as a credit on their AI account (fees are non-refundable). **Credits will be available for five years from the date the credit is issued.**

Candidates may use their credit for any AI fees, such as dues, courses, books, etc.

Candidates may re-schedule any exam appointment(s) to other date(s) within the same testing window, but they **must** contact Pearson VUE at least 24 hours in advance of their exam date. If examinees give adequate notice, there is no fee to reschedule, and they do not need permission from the AI Admissions department.

If Candidates want to change any module(s) to a different window, **they must follow these steps** to cancel their current registration. Once they receive credit, they may use the credit to sign up for the window of their choice.

1. Contact Pearson VUE **at least 24 hours prior to the exam date** and cancel the exam appointments for the module(s).
2. Pearson will send a confirmation email for each canceled module.
3. Please send all cancellation emails to comp@appraisalinstitute.org and make a cancellation request.
4. Once AI Admissions receives proof of cancellation, the Admissions staff will cancel the registration and issue a credit. Candidates will receive a confirmation email when the credit has been processed.

If an examinee does not attend their scheduled Pearson VUE exam appointments, or does not follow the above cancellation request process, exam fees for that testing window shall not be refunded nor applied to another window.

NOTE: The cancellation policy that appears in Pearson VUE confirmation e-mails is their generic policy and is **superseded** by this policy.

No-Shows and Re-Authorizations

Re-Authorization

If a Candidate misses a scheduled exam appointment, they can arrange re-authorization for that module and schedule it again for one of the remaining days of the exam window. It costs \$150 to re-authorize a module. Re-authorizations are not available on the last day of a testing window, and seating is subject to availability. For more information, please contact the Admissions staff.

No-Shows

A module is considered a “no-show” if the examinee did not attend their scheduled exam appointment and did not contact Pearson VUE to cancel the appointment at least 24 hours in advance. No-show modules are not eligible for exam fee credit.

Required Identification and Name Corrections

You must bring two (2) forms of identification to the Pearson VUE testing center. The primary ID must be a valid official state identification with your name, photo, and signature. The only acceptable forms of primary ID are driver's license, passport, national/state/province ID, military ID, alien registration card. The secondary ID must contain your name and signature; examples include credit/bank card or social security card.

Before you enter the testing room, the Pearson VUE staff may collect your digital photograph, digital signature, and/or your palm vein image and may digitally authenticate your ID. This is done to verify your identity and protect the security and integrity of the test.

IMPORTANT!

1. Both forms of ID must be valid (unexpired & undamaged), original (no photocopies), and in hard copy format (electronic IDs are not accepted).. If your primary ID has expired, you may present the hard copy renewal documents with the expired primary ID (electronic renewal documents are not accepted).
2. Both forms of ID must exactly match your first & last name as it appears on the exam registration at Pearson VUE, otherwise Pearson VUE will not permit you to take the examination(s)!
3. When registering for the Comprehensive Exam, the application will have a box to type the examinee's first and last name as it appears on their forms of ID. Please make sure to type the name exactly as it appears on the IDs.
4. If the name on your exam registration at Pearson VUE does not match the name on your IDs, please contact AI Admissions at comp@appraisalinstitute.org as soon as possible so this can be changed.

If a Candidate misses their exam(s) due to name-matching discrepancies or failure to present valid identification, they may need to pay an additional fee to re-authorize the missed module(s). Appraisal Institute and Pearson VUE are not responsible for problems and/or fees incurred from identification issues.

Calculators

The following calculator models are recommended: Hewlett-Packard (HP) models **10B**, **10Bii**, **12C**, **17Bii**, **17Bii+**, **19Bii**, and Texas Instruments (TI) model **BA II PLUS**. All calculator memories must be cleared before and after the exam. Calculator instruction manuals are not permitted in the testing room. An examinee may only use one (1) calculator in the testing room at a time.

Calculator maintenance and function are the examinee's responsibility! Appraisal Institute and Pearson VUE are not liable if an examinee's calculator malfunctions during the exam, and no extra time will be granted. Examinees are encouraged to change batteries before their exam or bring backup batteries/calculator with them to the testing center. Extra calculator supplies must be stored with other personal belongings during the exam and may not be accessed unless the original calculator malfunctions.

Spreadsheet Workbook Feature

Certain modules of the exam will feature a spreadsheet workbook for each question. The spreadsheet workbook is similar to Microsoft Excel, and all of the standard financial formulas used on the Comprehensive Exam can be used in the notepad. The workbook contains several blank spreadsheet tabs, and any data entered in the sheets will carry over in advancing through the exam. Examinees cannot create pivot tables and graphs and cannot add rows and columns. An examinee will be able to open and close the workbook at their discretion.

Use of the spreadsheet workbook is completely **optional**. It is simply an additional resource, like a calculator. Some questions may not necessarily require a spreadsheet to solve them.

Note: The **spreadsheet workbook will NOT be graded**. Examinees **must** select their answers from the multiple-choice options provided for each question.

As of August 1, 2023, the spreadsheet workbook is currently enabled for the following Comprehensive Exams:

- General Comprehensive Exam (MAI path)
- General Review Comprehensive Exam (AI-GRS path)
- Residential Comprehensive Exam (SRA path)

Formulas

A list of basic formulas is provided only for General Comp Exam Module III (Income Approach). These formulas are adequate for solving the questions in the module. The formula list is incorporated into the computerized exam format (i.e., not a separate paper handout).

Units of Measurement

The Comprehensive Exams use US customary units. Examinees are expected to know the following conversions: inches to foot, feet to yard, feet to mile, square feet to acre, acres to section, square miles to section.

What is Permitted in the Examination Room?

Pearson VUE maintains a high level of security in its testing centers. The **ONLY** item permitted in its testing rooms is a financial calculator.

All other personal items are strictly prohibited, including but not limited to cell phones, wallets, bags, purses, iPads/tablets, music players, food & drink, etc. All scratch paper, notes, books, and financial tables are also prohibited. The testing center will provide a private locker to store personal items during the exam. Pearson VUE will provide **TWO (2)** laminated, dry-erasable whiteboard booklets. Each booklet contains six (6) double-sided pages.

Please keep in mind that Pearson VUE can allow or prohibit any items in its testing rooms at its discretion. Before entering the testing room, the testing center staff may ask to check an examinee's pockets to ensure there are no prohibited items.

Pearson VUE can also provide sound-cancelling headphones and/or earplugs by request.

If a Candidate needs to take medicine or use any medical devices during the exam, they **MUST** notify the Admissions Department **at least six (6) weeks before** the exam to obtain approval by Pearson VUE. Without prior approval, Pearson VUE may prohibit the use of these items. All medical arrangements must be cleared, in advance, with the Admissions Staff and Pearson VUE. For more information about disability accommodations, please refer to the "Americans with Disabilities Act (ADA)" section of this document.

Misconduct

Engaging in misconduct relating to the Comprehensive Examination is prohibited. Misconduct includes, but is not limited to, the following:

- Unauthorized communication with another examinee or party while the examination is in progress;
- Copying or attempting to view another examinee's answers, worksheets, or work product or allowing another examinee to see answers, worksheets, or work product;
- Improperly possessing or using any unauthorized reference materials, textbooks, notes, equipment, or devices while the examination is in progress;
- Taking an examination for another person or arranging for another person to take an examination in the examinee's name;

- Disclosing, using, publishing, copying, reproducing, or transmitting examination content, in whole or in part, by any means or for any purpose;
- Failing to comply with written or oral instructions related to the examination; and
- Failing to comply with the provisions of the Examination Certification.

To ensure the integrity of the Comprehensive Examination, the Appraisal Institute will investigate any misconduct or suspected misconduct relating to an examination. If an examinee is found to have engaged in misconduct relating to the Comprehensive Examination, the Appraisal Institute will not grade or will assign a failing grade to the examination. If possible, conduct is observed while the examination is in progress, the exam may be confiscated.

Possible misconduct may also be referred to the Professional Practice department for review and possible disciplinary action under Regulation No. 6. In addition, the Appraisal Institute may initiate civil or criminal proceedings against the examinee as appropriate.

Report Exam Misconduct

Information regarding suspected or observed misconduct or other acts of unethical behavior relating to the examination should be reported to the Professional Practice department of the Appraisal Institute. Reports of suspected misconduct are treated confidentially and are fully investigated in accordance with the Appraisal Institute's commitment to ensuring the integrity of the Comprehensive Examination.

Pearson VUE Complaints

Each Pearson VUE location keeps a manual containing the exam policies of its client institutions, including the Appraisal Institute. If examinee's experience a minor issue such as being given the wrong type of whiteboard, please *politely* ask the testing center staff to check the manual for AI's Comp Exam policies. Minor problems are usually fixed immediately.

If an examinee has comments/complaints about their Pearson VUE experience, please submit a case report **before** leaving the testing center. Pearson VUE follows up on all comments/complaints with the examinee privately.

Appraisal Institute examinees are expected to respect and abide by Pearson VUE's policies. Refusal to comply could result in actions including but not limited to, expulsion from the testing center and/or forfeiture of exam fees.

(Next page)

Exam Results

After the end of the testing window, exam results are collected by Pearson VUE and sent to the Admissions Department. AI Admissions does **NOT** receive exam results for individual examinees as they take each module. Pearson VUE sends this information to us after the end of the testing window. In the interest of ensuring exam confidentiality and fairness for all examinees, exam results are issued after all testing is completed. Exam results may be viewed in an examinee's AI account.

Exam results will be accessible to examinees approximately five to 10 business days after the END of the testing window. Examinees will receive an email notification when their exam results are ready.

Please do NOT call the National Office to inquire about exam results. If an examinee has not received exam results more than two (2) weeks from the end of the testing window, please contact the Admissions Department.

All exams undergo two gradings: first by Pearson VUE and its grading system when sending the results to AI; and second, by AI staff when importing the candidates' answers into AI's system, NetForum. AI staff verifies these two entirely separate grading systems generate the same results. The Comprehensive Examination Panel may in its discretion choose to direct AI staff to re-grade one or more comprehensive examinations.

Equivalencies

General Candidates and General Review Candidates shall receive equivalency credit for passing Module I ("General Concepts" modules) of either the General Comprehensive Exam or the General Review Comprehensive Exam.

(Next page)

Americans with Disabilities Act (ADA)

Appraisal Institute is committed to ensuring access to its exams for all individuals with disabilities. Appraisal Institute will provide reasonable and appropriate accommodation to individuals with documented disabilities who demonstrate a need for accommodations. Requests for accommodation are considered on a case-by-case basis.

Reasonable efforts will be made to accommodate individuals whose requests are received **at least six (6) weeks prior** to the testing window. If approved, AI cannot guarantee that the requested accommodation(s) will be available at the preferred Pearson VUE testing center and/or during the preferred testing window. Please submit a request as early as possible to maximize the likelihood of approval on an accommodation(s) for a preferred testing center and window. Applicants must resubmit documents if their disability status or requested accommodation changes. Please allow at least 30 business days for review of ADA materials.

AI Admissions will notify Candidates by email of a decision. If approved, AI will provide instructions for scheduling the accommodated exams with Pearson VUE's Accommodations Team. Please then contact Pearson VUE to schedule your exam(s) as soon as authorization is granted, as AI cannot guarantee that the preferred testing center locations will have the facilities available for an accommodated exam during the preferred testing window. ***Make sure to provide AI Admissions with a current, accurate email address.*** If an accommodation request is denied, an examinee may appeal that decision by completing and filing a Candidate Appeal Form.

1. Read the [Documentation Guidelines for Candidates Requesting Examination Accommodations](#).
2. Print a copy of the **Accommodations Request Form** for the disability and complete the appropriate sections. A completed Accommodation Request Form shall remain valid for one (1) year from the date of submission. The form will be considered for examinations occurring within the one (1) year period.
3. If not already completed, give the evaluator (doctor, psychologist) a copy of the **Accommodations Request Form and the Documentation Guidelines for Evaluators** for the disability. The evaluator should complete the relevant sections of the form and make sure that the documentation he/she provides meets our guidelines. In most cases, the evaluator will be a psychologist or doctor who administers a series of psychological, educational, or medical tests and provides a copy of a diagnostic report or a detailed letter.
4. After the completion of the Accommodations Request Form and the gathering of all supporting documentation, scan, and email the documents to comp@appraisalinstitute.org.

Accommodation Request Forms

[LCD: Learning & Other Cognitive Disabilities](#)

[ADHD: Attention Deficit Hyperactivity Disorder](#)

[EPP: Psychological & Psychiatric Disorders](#)

[PCH: Physical Disorders & Chronic Health Cond.](#)

Guidelines for Evaluators

[LCD: Evaluator Guidelines](#)

[ADHD: Evaluator Guidelines](#)

[EPP: Evaluator Guidelines](#)

[PCH - Evaluator Guidelines](#)

Extensions: [Extension Form](#)

Appeal: [Candidate Appeal Form](#)

Section 2: Study Tips and Recommended Courses/Textbooks

Comprehensive Examination Tips

The purpose of the Comprehensive Exam is to evaluate an examinee's ability to apply their appraisal knowledge and experience to solve real property valuation problems at a level expected of an Appraisal Institute Designated member. An examinee will be tested on personal appraisal knowledge and experience, together with the ability to use sound reasoning and judgment to solve appraisal problems.

Classic Exam Strategies

- There is no penalty for guessing, as only correct answers are counted in the final score. All questions left blank will be marked as incorrect.
- Time management is critical. It is suggested to answer the easier questions first and flag the harder ones for later. There is a flag feature on the exam at Pearson VUE. Examinees can review their answers before completing the exam.
- Be familiar with the allotted time given to complete a module, so to know how much time is needed for each question. For example, Module II of the General Comp Exam is 210 minutes and contains 50 scored questions—which gives an examinee slightly more than four (4) minutes for each question.
- Read each question carefully. Examinees should make sure exactly what the question is asking *before* they start solving it.
- If skipping ahead or trying to anticipate where a question is going, the more likely it will be answered incorrectly. Don't assume or insert data into a question; rely solely on the information provided.
- Math skills, such as geometry, algebra, statistics, and an understanding of basic finance, are necessary to successfully complete *all* modules. Furthermore, understand how to interpret legal descriptions, understand degrees and angles (right angle vs. circle), volumes, and other topics as basic as direction (north, south, east, and west).
- Distractors (incorrect answer choices) are often derived from common mistakes, including incorrect keystrokes. This is a common practice on high-level exams.
- The exam questions mirror problems faced by appraisers in their daily lives and many questions were derived from real-life scenarios and applications.
- It may be possible to narrow down the correct answer with logic and reasoning.

(Next page)

What Can I Use to Study for the Comprehensive Examination?

Comprehensive examination critiques (if already taken the exam)

Comp Exam critiques show the subject areas (categories) tested in that module, and how many questions missed in each category. Each question in a module is assigned to only one category. When studying for re-exams, focus on any categories with ***3-4 or more*** missed questions. Improving in a few key areas tends to be more effective than trying to “study everything.”

Try searching the most-missed categories in the index & table of contents of the course materials and textbooks. This can help create a targeted list of chapters/lectures/pages to study. Try comparing Comp Exam critiques to critiques from prerequisite education courses. It’s likely the same topics/concepts will appear in both.

Qualifying education (QE) course materials and exam critiques

Qualifying education material is some of the most valuable study material for the comprehensive examination. Much of the basic information found in these materials are the foundation for examination questions. Examinees tend to be more successful when they’ve studied a breadth of resources, ***including QE and textbooks***. Comp modules are *not* “re-tests” of the Qualifying Education courses. Study areas that parallel Comp Exam topics.

Prerequisite education course materials and exam critiques

Some examinees study only their prerequisite course materials. These are excellent study resources, but ***don’t limit your studying to just these materials!*** Examinees tend to be more successful when they’ve studied a breadth of resources, including QE and textbooks. Comp modules are *not* “retests” of the prerequisite education courses; the comp exam is the next step beyond these courses. Examinees are expected to integrate classroom knowledge with critical thinking and their own professional experience.

Critiques are not meant to calculate a score, but generally, the more categories listed in the critique, the ***lower*** the passing score. Our research shows that Candidates who score just above passing on their prerequisite education course exams (70-80%) tend to have more difficulty passing the corresponding Comp modules, whereas those who have higher scores (85%+) tend to have less difficulty. Study areas that parallel Comp Exam topics.

Self-study quizzes and “Digging Deeper” exercises

The course materials contain self-study quizzes and/or “Digging Deeper” exercises, depending on the course (these are usually at the end of each lesson). These exercises are designed to take the concepts taught in the lesson to the next level of difficulty, critical thinking, and applications. These exercises are excellent practice for the Comp Exam, and they are highly recommended by the Comprehensive Exam Panel.

AI textbooks

AI textbooks make excellent study resources, and some of them contain practice questions (for more information please see “List of Courses & Textbooks” on page 6 of this document). Some of these recommended books are also available together in a book package: Supplemental Study for AI Comp Exam

Bundle. The book *Practice Examination Questions for Real Estate Appraisers* is designed for the state certification exams, not the Comp Exam. Examinee can use it to practice the fundamental concepts, but please keep in mind that these questions are much simpler than Comp questions. If using this book for Comp prep, the score should be over 90% correct on the questions (ideally 100%) to adequately prepare for the exam.

Re-take courses and exams related to the module(s)

If re-taking a course for Comp preparation, please take the course exam too. It is not required, but it's the only way to evaluate performance in the course (and if it's a prerequisite education course, a critique will be provided).

Find additional study material in the Lum Library

Candidate benefits include free access to the Lum Library. Lum Library Senior Manager, Eric Goodman, can also help with finding articles & other material pertaining to topics an examinee is struggling with.

Practice fundamental skills

Basic math skills • These are extremely important for success on the exam, so make sure to dedicate some study time to these concepts as well! (Examples: addition, subtraction, multiplication, division, decimals, fractions, ratios, algebra, geometry, statistics, etc.)

Critical thinking • At its core, the Comp focuses much more heavily on problem solving, as opposed to rote memorization. Successful examinees will have sound logic, judgement, and strong critical thinking skills.

Calculator fluency • Calculator technique should be **flawless**. Many examinees miss questions due to simple calculator errors. For extra practice, try using a calculator in daily work in the weeks leading up to the exam.

Exam strategies • It's always helpful to employ classic test-taking strategies. For more information, see the "Classic Exam Strategies" section on page 11 of the Comp Guidebook.

Testing environment • Consider preparing for the testing environment itself. For example, Pearson VUE testing centers provide whiteboard booklets in lieu of scratch paper, so try using a whiteboard for calculations while studying at home. Or try timing the time it takes to complete the practice questions.

AI Recommended Course and Textbook Study Materials

As recommended by the Comprehensive Examination Panel. Click the links below to search these courses/textbooks on the Appraisal Institute website. **Key:** Dots (•) indicate AI courses. Arrows (➤) indicate AI textbooks.

GENERAL COMPREHENSIVE EXAM (MAI PATH)

Module I: General Concepts

General state-certification courses (qualifying education)

- Basic Appraisal Principles
 - Basic Appraisal Procedures
 - General Appraiser Market Analysis and Highest & Best Use
 - General Appraiser Site Valuation & Cost Approach
 - General Appraiser Income Approach / Part 1
 - General Appraiser Income Approach / Part 2
 - General Appraiser Sales Comparison Approach
 - Real Estate Finance, Statistics, & Valuation Modeling
-
- *Market Analysis for Real Estate, 2nd ed.*
 - *An Introduction to Statistics for Appraisers*
 - *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
 - *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
 - *The Dictionary of Real Estate Appraisal, 6th ed.*

Module II: Cost Approach, Highest and Best Use, and Feasibility

- General Appraiser Market Analysis and Highest & Best Use
 - General Appraiser Site Valuation & Cost Approach
 - Advanced Market Analysis and Highest & Best Use (or old Courses 520, 530, 550)
-
- *In Defense of the Cost Approach: A Journey into Commercial Depreciation*
 - *Market Analysis for Real Estate, 2nd ed.*
 - *An Introduction to Statistics for Appraisers*
 - *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
 - *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
 - *The Dictionary of Real Estate Appraisal, 6th ed.*

Module III: Income Capitalization Approach

- General Appraiser Income Approach / Part 1
- General Appraiser Income Approach / Part 2
- Advanced Income Capitalization (or old Courses 510, 550)

- *Capitalization Theory and Techniques Study Guide* - **Excellent** text for income-related topics
- *Rates and Ratios Used in the Income Capitalization Approach*
- *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
- *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
- *The Dictionary of Real Estate Appraisal, 6th ed.*

Module IV: Sales Comparison Approach

- General Appraiser Market Analysis and Highest & Best Use
- General Appraiser Sales Comparison Approach
- Real Estate Finance, Statistics, & Valuation Modeling
- Quantitative Analysis
- Advanced Concepts & Case Studies (or old Courses 530, 550)

- *Market Analysis for Real Estate, 2nd ed.*
- *An Introduction to Statistics for Appraisers*
- *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
- *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
- *The Dictionary of Real Estate Appraisal, 6th ed.*

Note: The book *Practice Examination Questions for Real Estate Appraisers* is designed to help students prepare for the state-certification exams, **not** the Comp Exam. However, this is a good resource for practicing the fundamental concepts covered in all Comp modules. These questions are much simpler than Comp questions, so strive for 100% correct on these questions to adequately prepare for the Comp.

(Next page)

RESIDENTIAL COMPREHENSIVE EXAM (SRA PATH)

Module I: Residential Appraisal Concepts

Residential state-certification courses (qualifying education)

- Basic Appraisal Principles
 - Basic Appraisal Procedures
 - Residential Market Analysis and Highest & Best Use
 - Residential Site Valuation and Cost Approach
 - Residential Sales Comparison and Income Approaches
 - Residential Report Writing and Case Studies
 - Real Estate Finance, Statistics, & Valuation Modeling
 - Advanced Residential Applications and Case Studies, Part I
 - Advanced Residential Report Writing, Part II
-
- *Residential Property Appraisal*
 - *Scope of Work, 3rd ed.*
 - *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
 - *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
 - *The Dictionary of Real Estate Appraisal, 6th ed.*

(Next page)

GENERAL REVIEW COMPREHENSIVE EXAM (AI-GRS PATH)

Module I: General Appraisal Concepts

General state-certification courses (qualifying education)

- Basic Appraisal Principles
 - Basic Appraisal Procedures
 - General Appraiser Market Analysis and Highest & Best Use
 - General Appraiser Site Valuation & Cost Approach
 - General Appraiser Income Approach / Part 1
 - General Appraiser Income Approach / Part 2
 - General Appraiser Sales Comparison Approach
 - Real Estate Finance, Statistics, & Valuation Modeling
- *Market Analysis for Real Estate, 2nd ed.*
- *An Introduction to Statistics for Appraisers*
- *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
- *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
- *The Dictionary of Real Estate Appraisal, 6th ed.*

Module II: General Review Theory

- Review Theory – General
 - Review Case Studies – General
- *Review Theory and Procedures: A Systematic Approach to Review in Real Property Valuation*
- *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
- *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
- *The Dictionary of Real Estate Appraisal, 6th ed.*

Note: The general state-certification courses listed above for Module I are also useful resources for Module II.

(Next page)

RESIDENTIAL REVIEW COMPREHENSIVE EXAM (AI-RRS PATH)

Module I: Residential Appraisal Concepts & Review Theory

Residential state-certification courses (qualifying education)

- Basic Appraisal Principles
 - Basic Appraisal Procedures
 - Residential Market Analysis and Highest & Best Use
 - Residential Site Valuation and Cost Approach
 - Residential Sales Comparison and Income Approaches
 - Residential Report Writing and Case Studies
 - Real Estate Finance, Statistics, & Valuation Modeling
 - Advanced Residential Applications and Case Studies, Part I
 - Advanced Residential Report Writing, Part II
 - Review Theory – Residential
 - Review Case Studies – Residential
-
- *Review Theory and Procedures: A Systematic Approach to Review in Real Property Valuation*
 - *Market Analysis for Real Estate, 2nd ed.*
 - *The Appraisal of Real Estate* (current edition) - **Outstanding overall resource; a must-read!**
 - *The Student Handbook to The Appraisal of Real Estate* (current edition) - incl. practice questions.
 - *The Dictionary of Real Estate Appraisal, 6th ed.*

Comprehensive Examination Preparation Courses

All “Comp prep courses” are third-party programs. The Appraisal Institute, which administers the Comprehensive Examination, has **not** provided any information about the actual content of the Comprehensive Examination to the developers of these third-party seminars/preparation programs, nor has the Appraisal Institute, including its Chapters, participated in the development of, or otherwise contributed to, reviewed, or approved the content of the seminars. The Appraisal Institute, including its Chapters, provides no representations or guarantees that any of these seminars/prep programs will help Candidates in any way in taking the Comprehensive Examination.

(Next page)

Section 3: Exam Purpose and Sample Questions

General Comprehensive Examination (MAI path)

The General Comprehensive Examination is a four (4)-part, modular exam with multiple-choice questions based on the methods, techniques, information, and other content presented in the courses, exams, publications, and body of knowledge of the Appraisal Institute. A module may contain more than 50 questions; however, an examinee will only be scored on 50. As part of AI's testing development, unscored questions are occasionally and randomly placed on the exam to collect and analyze performance data for future use, but these questions are not scored, and thus do not count toward the final grade. Always select the **best** answer out of the possible choices.

These modules are designed so that a properly prepared Candidate will have adequate time to complete each question.

There is a specific passing score for each module; the exam is not graded on a curve. Examination statistics are confidential. The General Comprehensive Examination Panel may at its own discretion choose to re-grade one or more comprehensive examinations.

PURPOSE OF THE GENERAL COMPREHENSIVE EXAM

The use of Comprehensive Examinations at the end of formalized training has a long tradition in both academic and professional circles in the fields of law, medicine, accounting, humanities, and the sciences. The objective of this examination is to evaluate both the examinee's appraisal knowledge and the examinee's ability to use that knowledge to solve appraisal problems in the real world.

As a future MAI Designated member, Candidates must know current methods, techniques, information, and other content presented in the courses, exams, publications, and body of knowledge of the Appraisal Institute, and can utilize that knowledge to solve appraisal problems. The General Comprehensive Exam is a measure of the ability to perform in real-world situations.

HOW TO PREPARE

How do examinees prepare? Some study, some don't, some need to study, some don't. Some say that a good night's sleep is a prerequisite. Others say 100 hours of study is not enough. It's a matter of personal preference based on the ability to take exams, background, and judgment.

The initial thrust of preparation for the General Comprehensive Examination should be to polish skills in applying appraisal knowledge from Appraisal Institute courses, exams, and publications to solving appraisal problems. To successfully complete this examination, an examinee should have a mastery of appraisal concepts including market analysis, discounted cash flow, leasehold interest, cost approach, depreciation, adjustments, reconciliation, and other aspects of the valuation process. Determine the reasonableness of an answer considering circumstances stated in the problem.

Review the current edition of *The Appraisal of Real Estate* and *The Dictionary of Real Estate Appraisal*. Knowledge of definitions, principles, and basic theory will be required to solve the exam problems. In preparation for the exam, try developing some questions that require judgment to reach solutions. Try anticipating answers considering the exam outline included in this guidebook.

The modules of the General Comprehensive Exam are ***not*** designed as re-tests of the corresponding Appraisal Institute courses. Course materials, particularly the prerequisite education, are important resources for proper exam preparation. AI Admissions recommends that a review include, at the very minimum, the prerequisite education courses. A review of the *Capitalization Theory and Techniques Study Guide* textbook could also be beneficial for income capitalization. For a full list of recommended study materials, please refer to the section of this document titled "AI Recommended Course and Textbook Study Materials."

An analysis of examinees' performance who have taken the General Comprehensive Exam has shown that the examinees with the most recent prerequisite education courses perform much better overall than those that took them longer ago, or not at all. The Comprehensive Examination Panel strongly recommends that a Candidate attend and take the examinations for the prerequisite education courses if they are preparing for the Comprehensive Exam.

Finally, become very familiar with a financial calculator. Know and understand how to use all its financial functions prior to the exam.

(Next page)

WHAT IS COVERED IN THE GENERAL COMPREHENSIVE EXAM (MAI PATH)

The General Comprehensive Examinations are based on the Appraisal Institute body of knowledge for MAI Designated membership. The body of knowledge may include appraisal concepts and personal professional experience; it may cover anything in the Appraisal Institute required coursework, current appraisal literature and textbooks. These Examinations are designed, in part, to measure ability to integrate classroom knowledge with professional experience and critical thinking.

The concepts tested within the modules may include, **but are not limited to:**

<p>Module I: General Concepts</p> <ul style="list-style-type: none"> Principles of Real Estate Appraisal <ul style="list-style-type: none"> Identification of the Problem Terminology Economics Nature of Real Estate & Market Analysis <ul style="list-style-type: none"> Market Data & Analysis Property Characteristics Data Collection Analytical Skills <ul style="list-style-type: none"> Statistics Mathematics Knowledge of Financing Valuation Techniques Reconciliation <ul style="list-style-type: none"> Analytics Reasoning 	<p>Module III: Income Capitalization Approach</p> <ul style="list-style-type: none"> Direct Capitalization Concepts <ul style="list-style-type: none"> Basic Capitalization Concepts Projecting Cash Flows Yield Capitalization Concepts <ul style="list-style-type: none"> Yield Capitalization Risk Concepts <ul style="list-style-type: none"> Risk Analysis Leverage Advanced Concepts <ul style="list-style-type: none"> Applications of the Income Approach Investment Analysis Concepts Stabilizing Income & Equity Yield Capitalization Supporting the Discount Rate
<p>Module II: Cost Approach, H&BU, Feasibility</p> <ul style="list-style-type: none"> Cost Approach <ul style="list-style-type: none"> Obsolescence Depreciation Principles Land Valuation <ul style="list-style-type: none"> Units of Comparison Elements of Comparison Characteristics Analysis & Reconciliation Highest & Best Use <ul style="list-style-type: none"> Reconcile Alternative Uses Highest & Best Use Tests Market Analysis & Feasibility <ul style="list-style-type: none"> Demand Analysis Supply Analysis Property Productivity 	<p>Module IV: Sales Comparison Approach</p> <ul style="list-style-type: none"> Transactional Analysis <ul style="list-style-type: none"> Principles & Introduction Property Rights Conveyed, Financing Terms, Expenditures Immediately After Purchase, Market Conditions Property Characteristics Analysis <ul style="list-style-type: none"> Location, Physical Characteristics, Economic Characteristics, Use/Zoning, Non-Realty Components Adjustment Techniques & Qualitative Analysis Market Analysis <ul style="list-style-type: none"> Highest & Best Use Review, Applicability, Units of Comparison Data Collection and Confirmation Applications & Reconciliation <ul style="list-style-type: none"> Reconciliation Applications of the Sales Comparison Approach

SAMPLE QUESTIONS FOR THE GENERAL COMPREHENSIVE EXAM (MAI PATH)

The following are sample questions intended only to show the format of questions on the exam.

Please note: The incorrect answer choices may be derived from logic errors or careless mistakes made when solving the question. This is a common practice in high-stake examinations.

- 1) Eleven years ago, the seller carried back a \$100,000-purchase-money mortgage, with 20 years' amortization, 8.5%, and monthly payments. The loan cannot be assumed by a subsequent buyer. Currently mortgages on similar real estate are yielding 12%. Market value of the real estate is \$150,000. Current net operating income is \$16,500.

What would happen to the market value of the real estate if the loan could be assumed?

- A) increase significantly
- B) decrease significantly
- C) decrease slightly
- D) remain the same

Answer (D) is correct. Market value has not changed because of the financing. Market price, however, probably has. This question requires the Candidate to apply knowledge of the differences between market price and market value to a specific set of circumstances. This is not a trick question, but rather involves the philosophy of the definition of market value.

- 2) How are the various indications of value analyzed in the reconciliation process?

- A) major emphasis is placed on the approach(es) that appear to be the most reliable
- B) the cost approach sets the upper limit of value
- C) the median of the various value indications is adopted
- D) the three approaches are averaged

Answer (A) is correct. In the reconciliation, the appraiser must analyze the strengths and weaknesses of each approach used in the appraisal. The outcomes of the approaches are then compared to form a conclusion of value.

Answer (B) is incorrect. This statement is not based on recognized appraisal theory.

Answers (C) & (D) are incorrect. The mean and median are measures of central tendency that fail to analyze the applicability and relevance of the approaches.

The following questions [3-4] are based on the information below:

A small parcel of speculative land was purchased for \$60,000 with \$17,000 down and the balance of \$43,000 financed at 10% with monthly payments of \$300 and a balloon in five years.

- 3) What will the loan balance be (nearest \$100) after five years?
- A) \$47,300
 - B) \$47,500
 - C) \$67,400
 - D) \$94,000
- 4) If the interest rate is not 10%, causing the loan balance to be \$50,000 after five years, and the purchaser is to receive a 15% equity yield, what must the sale price (nearest \$100) be in five years?
- A) \$58,500
 - B) \$59,900
 - C) \$108,500
 - D) \$120,000

The correct answer to Question 3 is (B). Solution of this problem on a financial function's calculator is straightforward. Keystrokes for an HP12C are: f FIN 5 g n 10 g i 43,000 PV 300 CHS PMT FV. Note that the loan should be analyzed on a monthly basis and has a negative amortization.

Also, note that Answer (D) results from overlooking CHS, Answer (D) from mixing monthly and annual parameters, and Answer (A) from performing the calculations annually.

The correct answer to Question 4 is (C), and is calculated as follows:

FV of \$17,000 for 5 years @ 15% = \$34,193
FV of \$3600/year for 5 years @ 15% = \$24,273
Mortgage balance @ end of 5 years = \$50,000

TOTAL \$108,466

Note: The \$300/month interest payment becomes a part of the investment in the property. Therefore, it must be included in the calculations. Keystrokes for an HP12C are: f FIN 5 n 15 i 17000 chs PV 3600 chs PMT FV 50,000 +. The correct answer to Question 4 does not depend on choosing the correct answer to Question 3.

- 5) Comparable properties have been selling for 6.0 to 6.5 times gross income. The typical expense ratio is 45%. What is the indicated overall rate range?
- A) 0.069 to 0.075
 - B) 0.085 to 0.092
 - C) 0.109 to 0.118
 - D) 0.133 to 0.144

Answer (B) is correct. Gross income (100%) minus expenses (45%) is net income (55%). Net income (55%) divided by 6.0 equals 0.092 (overall rate), while 55% divided by 6.5 equals an overall rate of 0.085.

The other answer options are incorrect and may be derived from misapplication of the procedures, such as dividing the expense ratio (45%) instead of the net income ratio (55%).

- 6) The following property is encumbered by a ten-year lease. Based on the following data, what is the present value of the leased fee interest?

Net operating income:	\$24,000 in Year 1; increasing \$1,000 per year
Projection period:	5 years
Property value change:	3% per year increase (compounded)
Yield rate:	10%

- A) \$258,100
- B) \$324,700
- C) \$342,900
- D) \$349,200

Answer (D) is correct. This is an advanced concept. The answer is obtained through proper application of the level income property model, applied to a calculated level equivalent income, using a calculated amount of change in value.

Answer (A) incorrectly considers only the increase in income and disregards the increase in the value of the property.

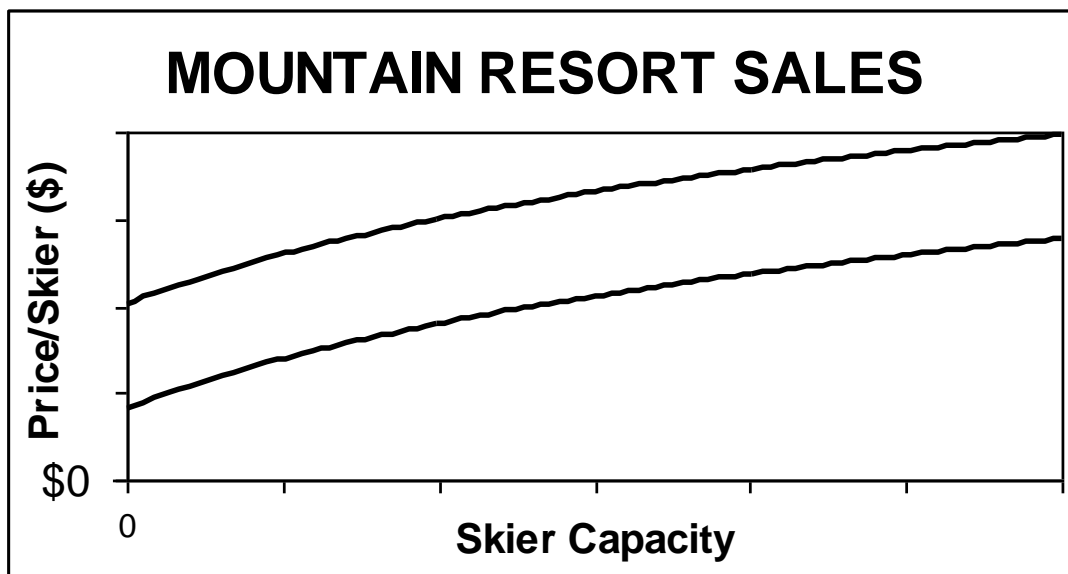
Answer (B) incorrectly considers only the increase in the value of the property and disregards the increase in income.

Answer (C) results from capitalizing the first year's operating income at 7% (using the relationship $R = Y - CR$). This is incorrect, as this relationship only applies when the change in income and change in value are occurring at the same compound rate, which is not occurring in this case.

- 7) A \$250,000 loan can be obtained at 9.5% interest for 20 years with monthly payments. What will the lender's yield be if 4 points are charged, and the loan is paid off in 3 years?
- A) 9.50%
 - B) 10.09%
 - C) 11.12%
 - D) 13.50%

Answer (C) is correct. Answer (A) ignores points. Answer (B) loan runs 20 years. Answer (C) is 9.5% + points.

- 8) The subject property is a mountain resort. Incremental value is based on skier visits. Sales in the subject's region form a consistent curvilinear pattern, as shown below (**lower line**). The trend for a more desirable region is also shown (**higher line**).



Based on this market information, what type of location adjustment is indicated for sales in the more desirable region?

- A) downward dollar adjustment
- B) downward percent adjustment
- C) upward dollar adjustment
- D) upward percent adjustment

Answer (A) is correct.

9) The following sales were verified:

	Sale 1	Sale 2	Sale 3	Sale 4
Location	Similar	Similar	Similar	Similar
Size (SF)	5,800	4,900	4,600	6,000
Bedrooms	12	11	10	13
Units	6	6	5	6
Gross Income	\$23,000	\$20,500	\$21,000	\$24,500
Sale Price	\$150,000	\$140,000	\$125,000	\$160,000

Based on these sales, what appears to be the most reliable unit of comparison?

- A) gross income multiplier
- B) price per bedroom
- C) price per square foot
- D) price per unit

Answer (B) is correct.

10) A city has seen a rapid building of apartments with about 500 units built per year for the last five years. The current total of units in the town is 7,292 with about 10% current vacancy. The rapid rise in apartment units is due to the rapid increase in job growth. The current number of jobs in town is 25,000 with a forecast to be 32,000 jobs in the next five years.

Based on this data, what is the best estimate of total demand for occupied units five years hence?

- A) 7,700
- B) 8,400
- C) 9,300
- D) 9,800

Answer (B) is correct.

Answer (C) is 28% increase based on supply. Answer (D) is $500/\text{yr} \times 5 + \text{current supply}$. The current number of occupied apartments is $7,292 \times 90\%$, or 6,563 units. The forecast is that the number of jobs will increase by 28%. A 28% increase in occupied apartments would result in 8,400 occupied apartments.

- 11) An improved property sold for \$350,000. The purchaser assumed an existing mortgage that was issued five years prior to the sale. The original loan balance was \$250,000. The loan was for 30 years at 9% interest per annum, with monthly payments. This loan cannot be paid off. The current market interest rate for 25-year amortizing loans with monthly payments is 6%. If land value is \$100,000 and reproduction cost new of the improvements is \$400,000, what percent depreciation can be extracted?
- A) 19%
 - B) 22%
 - C) 38%
 - D) 56%

Answer (A) is correct.

Answer (B) amortizes \$250,000 for 25 years, not \$239,000 loan balance. Answer (C) does not include the necessary adjustment for cash-equivalency. Answer (D) is from deducting, not adding, the cash equivalency adjustment.

The first step is to calculate the cash-equivalent sale price. The monthly loan payments on the original \$250,000 at the contract interest rate are \$2,011.56 per month, and the balance is \$239,700. The present value of the 25 years of remaining monthly payments at the market interest rate of 6% is \$312,207. The cash equivalency adjustment is a PLUS \$72,507, indicating a cash-equivalent sale price of \$422,507 (the adjustment is positive because the buyer assumed an onerous loan that cannot be paid off).

Deducting \$100,000 for the land value leaves \$322,507 for the contributory value of the improvements. When compared with the \$400,000 replacement cost new, the indicated depreciation is 19.37%.

(Next page)

Residential Comprehensive Examination (SRA path)

The Residential Comprehensive Examination is a one (1)-part, modular exam with multiple-choice questions based on the methods, techniques, information, and other content presented in the courses, exams, publications, and body of knowledge of the Appraisal Institute. A module may contain more than 50 questions; however, will only be scored on 50. As part of AI's testing development, unscored questions are occasionally and randomly placed on the exam to collect and analyze performance data for future use, but these questions are not scored, and thus do not count toward the final grade. Always select the best answer out of the possible choices.

The module is designed so that a properly prepared Candidate will have adequate time to complete each question.

There is a specific passing score for the module; the exam is not graded on a curve. Examination statistics are confidential. The Residential Comprehensive Examination Panel may at its own discretion choose to re-grade the comprehensive examination.

PURPOSE OF THE RESIDENTIAL COMPREHENSIVE EXAM

The use of comprehensive examinations at the end of formalized training has a long tradition in academic and professional circles in the fields of law, medicine, accounting, humanities, and the sciences. The objective of this examination is to evaluate both the examinee's appraisal knowledge and the examinee's ability to use that knowledge to solve appraisal problems in the real world.

As a future SRA Designated member, Candidates must know current methods, techniques, information, and other content presented in the courses, exams, publications, and body of knowledge of the Appraisal Institute, and can utilize that knowledge to solve appraisal problems. The Residential Comprehensive Exam is a measure of an ability to perform in real-world situations.

HOW TO PREPARE

How do examinees prepare? Some study, some don't, some need to study, some don't. Some say that a good night's sleep is a prerequisite. Others say 100 hours of study is not enough. It's a matter of personal preference based on an ability to take exams, background, and judgment.

The initial thrust of preparation for the Residential Comprehensive Examination should be to polish skills in applying appraisal knowledge from Appraisal Institute courses, exams, and publications to solving appraisal problems. To successfully complete this examination, an examinee should have a mastery of appraisal concepts including market analysis, the three approaches to value, depreciation, adjustments, reconciliation, and other aspects of the valuation process. Determine the reasonableness of an answer considering circumstances stated in the problem.

Review the current edition of *The Appraisal of Real Estate* and the *Dictionary of Real Estate Appraisal*. Knowledge of definitions, principles, and basic theory will be required to solve the exam problems. In preparation for the exam, try developing some questions that require judgment to reach solutions. Try anticipating answers considering the exam outline included in this guidebook.

The Residential Comprehensive Exam module is **not** designed as a re-test of the corresponding Appraisal Institute courses. Course materials, particularly the qualifying and prerequisite education, are important resources for proper exam preparation.

Finally, become very familiar with a financial calculator. Know and understand how to use all its financial functions prior to the exam.

(Next page)

WHAT IS COVERED IN THE RESIDENTIAL COMPREHENSIVE EXAM (SRA PATH)

The Residential Comprehensive Examination is based on the Appraisal Institute body of knowledge for SRA Designated membership. The body of knowledge may include appraisal concepts and personal professional experience; it may cover anything in the Appraisal Institute required coursework, current appraisal literature and textbooks. The examination is designed, in part, to measure an ability to integrate classroom knowledge with professional experience and critical thinking.

The concepts tested within this module may include, **but are not limited to:**

<p>Principles of Real Estate Appraisal</p> <ul style="list-style-type: none"> Nature of Value <ul style="list-style-type: none"> Types of Value Market Value Economic Principles Market Fundamentals Time Value of Money Concepts Valuation Process <ul style="list-style-type: none"> Problem Identification Scope of Work Reconciliation-Final <p>Nature of Real Estate & Property Analysis</p> <ul style="list-style-type: none"> Property Characteristics <ul style="list-style-type: none"> Physical Legal Economic Market Data <ul style="list-style-type: none"> Physical Economic Data Collection Measurement & Statistics <p>Market Analysis and Highest & Best Use</p> <ul style="list-style-type: none"> Market Analysis Highest & Best Use <ul style="list-style-type: none"> Test HBU As Vacant & As Improved Timing 	<p>Land or Site Valuation</p> <ul style="list-style-type: none"> Characteristics and HBU of Subject & Comparables Methods & Techniques Elements & Units of Comparison Reconciliation <p>Cost Approach</p> <ul style="list-style-type: none"> Cost Estimating Depreciation Types & Methods <p>Income Capitalization Approach</p> <ul style="list-style-type: none"> Estimating Income Capitalization <p>Sales Comparison Approach</p> <ul style="list-style-type: none"> Elements of Comparison <ul style="list-style-type: none"> Transactional Adjustments Property Adjustments Comparable Selection Adjustment Methods <ul style="list-style-type: none"> Qualitative Quantitative Reconciliation
---	---

SAMPLE QUESTIONS FOR THE RESIDENTIAL COMPREHENSIVE EXAM (SRA PATH)

The following are sample questions intended only to show the format of questions on the exam.

Please note: Incorrect answer choices may be derived from logic errors or careless mistakes made when solving the question. This is a common practice on high-stakes examinations.

- 1) An appraiser is analyzing a comparable sale for the purpose of extracting an annual percentage of depreciation. The appraiser uncovered the following information about the comparable property:
- The sale price is \$423,000
 - No transactional adjustment is needed for cash equivalency
 - The contributory site value is estimated at \$100,000
 - The estimated current cost of the improvements is \$475,000
 - The actual age of the property is 25 years
 - The physical life is 70 years
 - The remaining economic life is 30 years

Using the extraction method, what is the annual percentage of depreciation derived from this sale?

- A) 0.58%
- B) 0.71%
- C) 1.07%
- D) 1.28%

Answer (D) is correct. The key to extracting depreciation from a sale is to use actual age.

The first step is to derive the contributory value of the improvements from the property sale.

$$\$423,000 \text{ sale price minus } \$100,000 \text{ site value} = \$323,000 \text{ improvement value}$$

The next step is to derive the dollar amount of depreciation.

$$\$475,000 \text{ current cost minus } \$323,000 = \$152,000 \text{ dollar amount of depreciation}$$

The last step is to derive the total percentage of depreciation and convert it to an annual percentage.

$$\begin{aligned} \$152,000 \text{ divided by } \$475,000 &= 0.32 \text{ or } 32\% \text{ total depreciation; and} \\ 0.32 \text{ divided by } 25 \text{ years actual age} &= 0.0128 \text{ or } 1.28\%. \end{aligned}$$

Common logical errors could lead to one of the following incorrect options:

- Answer (A) uses the economic life of 55 years.
- Answer (B) uses a fabricated “remaining physical life” of 45 years.
- Answer (C) uses the identified remaining economic life of 30 years.

- 2) Properties in the subject's area are worth 75% of those in the comparable properties' area. If the average price of the comparable properties is \$450,000, what is the adjustment to the comparable sales?
- A) \$90,000
 - B) -\$90,000
 - C) \$112,500
 - D) -\$112,500

Answer (D) is correct. The subject property's area is worth 25% less than the area of the comparables, which have an average sale price of \$450,000. Adjustments would be $\$450,000 \times .25 = \$112,500$. Because the comparable properties' area is superior to the subject's area, the adjustment would be negative.

Answers (A) and (B) are incorrect. Dividing the average sale price of the comparables by 1.25 would reflect a 20% not 25% difference. A positive adjustment reflects that the subject is superior to the comparable and a negative adjustment reflects that the subject is inferior to the comparable.

Answer (C) is incorrect because the subject area is inferior and would require a negative adjustment.

(Next page)

- 3) A triplex recently sold at \$750,000. Two units are rented to long-term tenants at \$2,000 per month on a month-to-month basis and the third unit was recently rented at \$3,000 per month. All three units are identical. The tenants pay utilities, and the landlord pays taxes, insurance, and maintenance. Four similar units are rented at \$3,000 per month.

What is the gross rent multiplier for this sale?

- A) 62.50
- B) 83.33
- C) 107.14
- D) 125.00

Answer (B) is correct. The data indicates an anticipated gross monthly rental income of \$9,000 (i.e., three units @ \$3,000 per month). Dividing this figure into the sales price of \$750,000 results in a gross rent monthly multiplier of 83.33.

Common logical errors could lead to one of the following incorrect options:

- Answer (A) uses above-market monthly rental income of \$12,000 (four units @ \$3,000 per month).
- Answer (C) uses below-market monthly rental income of \$7,000 (two units @ \$2,000 per month + one unit @ \$3,000).
- Answer (D) uses below-market monthly rental income of \$6,000 (three units @ \$2,000 per month).

(Next page)

- 4) The subject is a single-unit residence zoned commercial general, which allows retail, office, and parking lots. The appraiser's estimated value as a residential property is \$175,000, but similar vacant commercial lots sell for \$295,000. Retail and office uses are weak and new construction is not occurring in this market area. It could be as many as three years before the commercial market recovers.

How should the current use be classified?

- A) illegal conforming use
- B) interim use
- C) inconsistent use
- D) legal conforming use

Answer (B) is correct. The question indicates that the property's present use does not use the land to its full potential, so market participants would price the property based on the risk and reward associated with the future use rather than the current use. Yet, the timing of the use is such that it may be as many as three years before development is feasible. Thus, the current use is an interim use.

Answer (A) is incorrect. This is a nonsensical term since an illegal use could not conform with use regulations.

Answer (C) is incorrect. The question indicates that the improvements are not enhancing land value.

Answer (D) is incorrect. There is no information in the question to suggest that the existing use conforms with use regulations.

(Next page)

- 5) Which of the following must be disclosed to provide the intended user with the proper context for a value opinion?
- A) closing date
 - B) effective date
 - C) engagement date
 - D) inspection date

Answer (B) is correct. "Proper context" is the key phrase to solving this question. In the valuation process, the effective date is one of the six assignment elements in problem identification that guides the appraiser in the scope of work determination, and therefore must be disclosed to the intended user to provide the proper context for the assignment results.

Answers (A), (C), and (D) are incorrect. These dates are not required to be disclosed and they are not determinative in the scope of work, which provides the proper context for the assignment results.

(Next page)

- 6) Vacant residential site comparables were analyzed in a recently developed subdivision. The sites are similar in all respects, except for dates. Most listings sell for 10% less than asking prices.

The following information was obtained:

Reference	Date	Sale/List Price
Sale 1	Closed 12 months ago	\$300,000
Sale 2	Closed 8 months ago	\$285,000
Listing 1	Listed 6 months ago (expired)	\$307,500
Sale 3	Closed 4 months ago	\$270,000

Which of the following statements best describes the value trends over the past year?

- A) values have increased about 10% over the past year
- B) values have increased about 15% over the past year
- C) values have decreased about 10% over the past year
- D) values have decreased about 15% over the past year

Answer (D) is correct as it concludes a decrease of about 15.0% per year.

Sales 1, 2, and 3 show a decreasing market from 12 months ago. This eliminates Answers (A) and (B).

Answer (C) is incorrect as it concludes a decrease of about 10.0% per year, which is not supported by any of the possible pairings.

Paired sales information:

- Comparing Sales 1 & 2 shows a decrease in price of 5.0% in four months, for an average annual decrease in price of 15.0%.
- Comparing Sale 1 and the adjusted price for Listing 1 (10% downward adjustment for being a listing) shows a decrease in price of 7.75% in six months, for an average annual decrease in price of 15.5%.
- Comparing Sales 1 and 3 shows a decrease in price of 10.0% in eight months, for an average annual decrease in price of 15.0%.
- Comparing Sale 2 and the adjusted price for Listing 1 (10% downward adjustment for being a listing) shows a decrease in price of 2.89% in two months, for an average annual decrease in price of 17.4%.
- Comparing Sales 2 and 3 shows a decrease in price of 5.26% in four months, for an average annual decrease in price of 15.8%.
- Comparing the adjusted price for Listing 1 (10% downward adjustment for being a listing) and Sale 3 shows a decrease in price of 2.44% in two months, for an average annual decrease in price of 14.6%.

7) What is the coefficient of variation for the sale price per front foot?

Sale	Sale Price/Acre	Sale Price/Front Ft.	Sale Price/Square Ft.
A	\$50,000	\$3,000	\$6.89
B	\$75,000	\$2,800	\$10.33
C	\$60,000	\$3,100	\$8.26
D	\$55,000	\$2,500	\$9.60

- A) 9.28%
- B) 10.77%
- C) 17.31%
- D) 18.00%

Answer (A) is correct. The standard deviation of \$264.5751 divided by the mean of \$2,850 equals 0.0928, or 9.28%.

Answer (B) is incorrect as it is the mean of \$2,850 divided by the standard deviation of \$264.5751, or 10.77, and then a % sign is added.

Answer (C) is incorrect as this is the coefficient of variation for sale price per SF (standard deviation of \$1.5184 divided by the mean of \$8.77 equals 17.31%).

Answer (D) is incorrect as it is the coefficient of variation for sale price per acre (standard deviation of \$10,801.23 divided by the mean of \$60,000 equals 18.00%).

(Next page)

Review Comprehensive Examinations (AI-GRS and AI-RRS paths)

PURPOSE OF THE REVIEW COMPREHENSIVE EXAMS (AI-GRS AND AI-RRS PATHS)

The use of Comprehensive Examinations at the end of formalized training has a long tradition in both academic and professional circles in the fields of law, medicine, accounting, humanities, and the sciences. The objective of this examination is to evaluate both the examinee's appraisal knowledge and the examinee's ability to use that knowledge to solve appraisal problems in the real world.

Before advancing to AI-GRS and/or AI-RRS Designated membership, an examinee must have knowledge of the methods, techniques, information, and other content presented in the courses, exams, publications, and body of knowledge of the Appraisal Institute. An examinee must be able to utilize that knowledge to solve real appraisal and appraisal review problems. The Review Comprehensive Examinations are a measure of an ability to perform in real-world situations.

A module may contain more than 50 questions; however, it will only be scored on 50. As part of AI's testing development, unscored questions are occasionally and randomly placed on the exam to collect and analyze performance data for future use, but these questions are not scored, and thus do not count toward the final grade. Always select the best answer out of the possible choices.

HOW TO PREPARE

How do examinees prepare? Some study, some do not, some need to study, some don't. Some say that a good night's sleep is a prerequisite. It is a matter of personal preference based on an ability to take examinations, background, and judgment.

An initial thrust of preparation for Review Comprehensive Examinations may be to polish skills in applying appraisal and appraisal review knowledge from Appraisal Institute courses, exams, and publications to solving appraisal review problems.

In preparation, remember that the exam will be testing not only appraisal review theory and practice, but also overall appraisal knowledge. Problem solving, and critical thinking skills will be crucial to success on the examination.

If taking the Review Comprehensive Examinations, appraisal knowledge should include market analysis and highest and best use, the three approaches to value, and reconciliation. Appraisal review knowledge should emphasize the six-step review process: identification of the problem, reviewer's scope of work, reviewer's research, and analysis (the five (5) criteria), review of appraiser's analyses, opinions, and conclusions, review of the appraisal report, and reviewer's own opinion of value.

Review the current edition of *The Appraisal of Real Estate* and the *Dictionary of Real Estate Appraisal*. In addition, study *Review Theory and Procedures: A Systematic Approach to Review in Real Property Valuation*. Although the Review Comprehensive Examinations are not tests for definitions, principles, or basic theory, knowledge of them will be required to solve the examination problems. In preparation for the exam, try developing some questions that require judgment to reach solutions. Try anticipating answers considering the exam outline included in this guidebook.

In addition to the textbooks above, exam preparation should focus on the course materials from the Appraisal Institute review courses. **Because the exam will also be testing basic appraisal knowledge, preparations should also include subject matter from the qualifying courses for state certification.**

Finally, become very familiar with a financial calculator. Know and understand how to use all its financial functions prior to the exam. An approved financial calculator is required for the exam.

WHAT IS COVERED IN THE REVIEW COMPREHENSIVE EXAMS (AI-GRS AND AI-RRS PATHS)

The Review Comprehensive Examinations are based on the Appraisal Institute body of knowledge for the Review Designations. The body of knowledge may include appraisal concepts, appraisal review theory, and applicable certification education (or equivalent), and personal professional experience; it may cover anything in the Appraisal Institute required coursework, current appraisal literature and textbooks. These Examinations are designed to measure an ability to integrate classroom knowledge with professional experience and critical thinking. The concepts tested within the modules may include, **but are not limited to (see next page):**

(Next page)

General Review Comprehensive Examination (AI-GRS Path)

<p>Module I: General Appraisal Concepts</p> <p>Principles of Real Estate Appraisal</p> <ul style="list-style-type: none"> Identification of the Problem Terminology Economics <p>Nature of Real Estate & Market Analysis</p> <ul style="list-style-type: none"> Market Data & Analysis Property Characteristics Data Collection <p>Analytical Skills</p> <ul style="list-style-type: none"> Statistics Mathematics Knowledge of Financing Valuation Techniques <p>Reconciliation</p> <ul style="list-style-type: none"> Analytics Reasoning 	<p>Module II: General Review Theory</p> <p>Identification of the Problem</p> <p>Reviewer’s Scope of Work</p> <p>Reviewer’s Research & Analysis</p> <ul style="list-style-type: none"> Completeness Accuracy Adequacy Relevance Reasonableness <p>Review of Appraiser’s Analyses, Opinions, Conclusions</p> <p>Review of Appraiser’s Report</p> <p>Reviewer’s Own Opinion of Value</p>
--	---

Residential Review Comprehensive Examination (AI-RRS Path)

<p>Residential Appraisal Concepts</p> <p>Market Analysis</p> <p>Site Valuation</p> <p>Cost Approach</p> <p>Highest and Best Use</p> <p>Depreciation</p> <p>Obsolescence</p> <p>Sales Comparison Approach</p> <p>Sales Comparison Adjustments</p>	<p>Residential Review Theory</p> <p>Identification of the Problem</p> <p>Reviewer’s Scope of Work</p> <p>Reviewer’s Research & Analysis</p> <ul style="list-style-type: none"> Completeness Accuracy Adequacy Relevance Reasonableness <p>Review of Appraiser’s Analyses, Opinions, Conclusions</p> <p>Review of Appraiser’s Report</p> <p>Reviewer’s Own Opinion of Value</p>
---	--

SAMPLE QUESTIONS FOR THE GENERAL REVIEW COMPREHENSIVE EXAM (AI-GRS PATH)

The following are sample questions intended only to show the format of questions on the exam.

Please note: Incorrect answer choices may be derived from logic errors or careless mistakes made when solving the question. This is a common practice on high-stake examinations.

- 1) How are the various indications of value analyzed in the reconciliation process?
- A) major emphasis is placed on the approach(es) that appear to be the most reliable
 - B) the cost approach sets the upper limit of value
 - C) the median of the various value indications is adopted
 - D) the three approaches are averaged

Answer (A) is correct. In the reconciliation, the appraiser must analyze the strengths and weaknesses of each approach used in the appraisal. The outcomes of the approaches are then compared to form a conclusion of value.

Answer (B) is incorrect. This statement is not based on recognized appraisal theory.

Answers (C) & (D) are incorrect. The mean and median are measures of central tendency that fail to analyze the applicability and relevance of the approaches.

- 2) Comparable properties have been selling for 6.0 to 6.5 times gross income. The typical expense ratio is 45%. What is the indicated overall rate range?
- A) 0.069 to 0.075
 - B) 0.085 to 0.092
 - C) 0.109 to 0.118
 - D) 0.133 to 0.144

Answer (B) is correct. Gross income (100%) minus expenses (45%) is net income (55%). Net income (55%) divided by 6.0 equals 0.092 (overall rate), while 55% divided by 6.5 equals an overall rate of 0.085.

The other answer options are incorrect and may be derived from misapplication of the procedures, such as dividing the expense ratio (45%) instead of the net income ratio (55%).

3) Which of the following characterizes a material error in an appraisal?

- A) it is a quantifiable error
- B) it is a significant issue that affects credibility
- C) it is a significant issue that does not affect credibility
- D) it is an error that is worthy of belief

Answer (B) is correct. An error may or may not be quantifiable, but a material error is significant and affects credibility.

4) An appraisal review report states that the appraiser who prepared the work under review “clearly committed fraud” by failing to identify and rely upon a certain nearby sale.

Is this an acceptable conclusion in an appraisal review?

- A) yes, if the reviewer determines that the appraiser who performed the appraisal was not aware of the sale
- B) yes, if the reviewer determines that the appraiser who performed the appraisal was aware of the sale and chose not to use it
- C) no, because such a conclusion relates to the intent of the appraiser and not to the work of the appraiser
- D) no, because the review appraiser is not an attorney

Answer (C) is correct. An appraiser acting in a review capacity should focus on the work under review, not the appraiser’s intentions.

(Next page)

- 5) In the context of a review assignment, an appraiser visited the property that is the subject of the work under review and prepared a review report. The reviewer noted a mathematical error in the income capitalization approach, which was the only approach applied. The vacancy and collection loss allowance was added, not subtracted. The report being reviewed concluded to a value of \$8,500,000. In the review report, the reviewer stated, "If the mathematical error in the analysis were corrected, the value conclusion would be \$7,900,000."

Has the reviewer performed an appraisal?

- A) yes, because the reviewer provided a specific value
- B) yes, because the reviewer physically visited the property
- C) no, because the reviewer is only indicating the impact of a mathematical error
- D) no, because this is a review assignment and not an appraisal assignment

Answer (C) is correct. The figure \$7,900,000 is merely the result of a specific calculation and is not expressed as the reviewer's opinion of value.

- 6) A developer has proposed a subdivision with two entrances to the community. The planning department has stipulated each entrance have four traffic signals. Each traffic signal will cost \$60,000, and a 5% discount will be received on signals beyond the first four.

What is the total anticipated cost for the traffic signals?

- A) \$432,000
- B) \$456,000
- C) \$468,000
- D) \$480,000

Answer (C) is correct. This includes four signals at full price (\$60,000 each) plus four signals discounted at 5% (\$57,000 each).

(Next page)

SAMPLE QUESTIONS FOR THE RESIDENTIAL REVIEW COMPREHENSIVE EXAM (AI-RRS PATH)

Sample questions for the Residential Review Comprehensive Exam (AI-RRS path) are in development. In the meantime, refer to the following resources:

1. Start with the sample questions in this Guidebook for the Residential Comp Exam (SRA), as the Residential Review Comp Exam also tests residential appraisal concepts in addition to residential review. Also, several of the sample questions for General Comp Exam (MAI) and General Review Comp Exam (AI-GRS) are applicable to residential appraisal and/or appraisal review.
2. Self-Study Quizzes and “Digging Deeper” questions in the residential review course materials. Also, the residential qualifying education (QE) contains these exercises and would be suitable for practice on residential appraisal topics. While the Comp Exam is not intended to be a re-hashing of the course exams, the key concepts tested on the Comp Exam are derived from these course materials. For more information, please see the section: “What Can I Use to Study for the Comp Exam?”
3. The AI Store has a book called *Practice Examination Questions for Real Estate Appraisers*. This book is mainly geared toward state certification exam prep, but it is also a good study resource for the Comp Exam. It contains both residential and nonresidential topics, with a heavy emphasis on appraisal basics. This is a very good resource if looking for practice in basic fundamentals.

These sample questions represent the general format to be expected on the exam. They do not reflect distribution of types of questions, styles of questions, or areas to be covered in the exam.

This guidebook is intended to be informative instead of a course on the examinations. The Comprehensive Exam Panel hopes these guidelines will enable Candidates to prepare better and to anticipate the types of questions they will find on these exams. Please direct any questions to comp@appraisalinstitute.org.

The Comprehensive Examination Panel

Contact

Admissions & Continuing Education

P: (312) 335-4111

E: comp@appraisalinstitute.org

4/3/24cd